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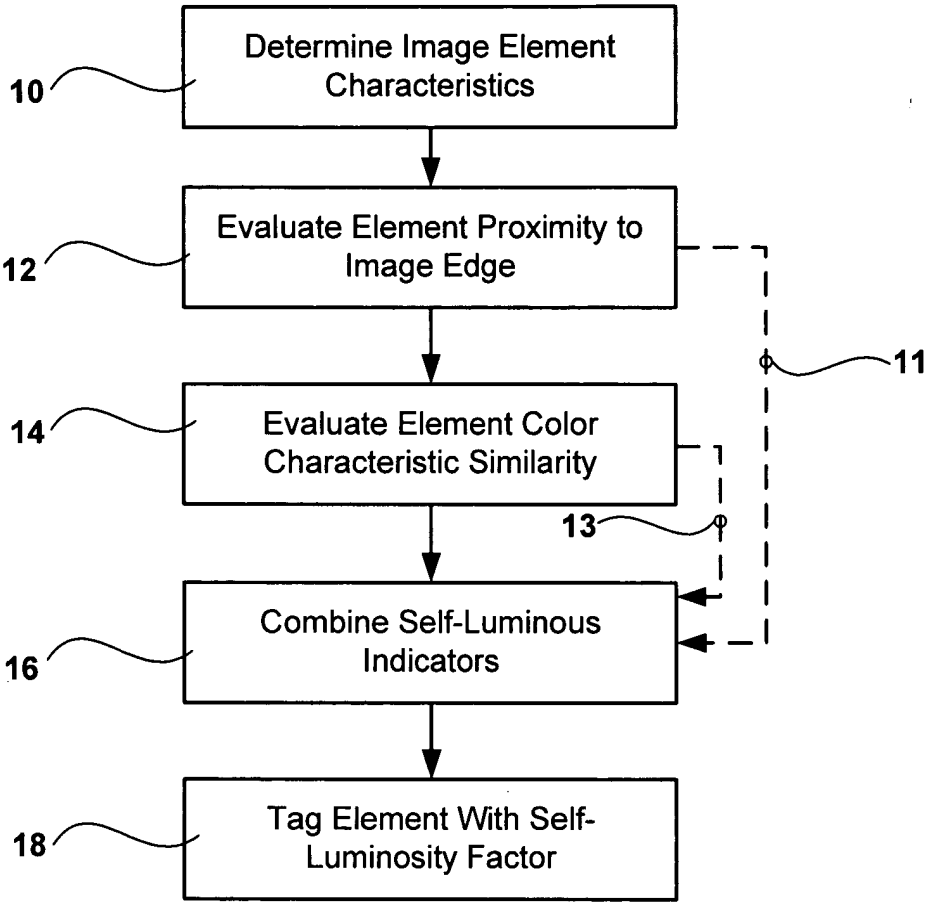

Figure 1(a)

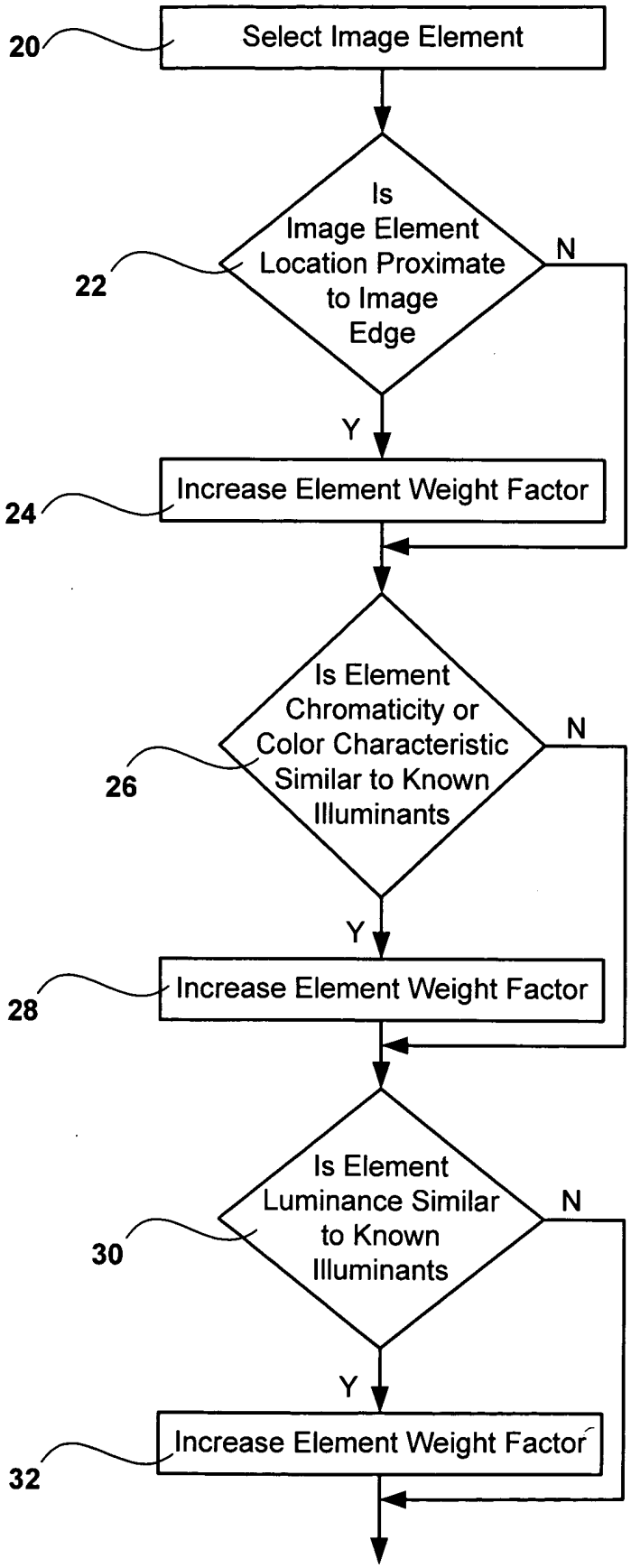
20
Select Image Element
22
Is Image Element Location Proximate to Image Edge
N
Y
24
Increase Element Weight Factor
26
Is Element Chromaticity or Color Characteristic Similar to Known Illuminants
N
Y
28
Increase Element Weight Factor
30
Is Element Luminance Similar to Known Illuminants
N
Y
32
Increase Element Weight Factor

Figure 1(b)

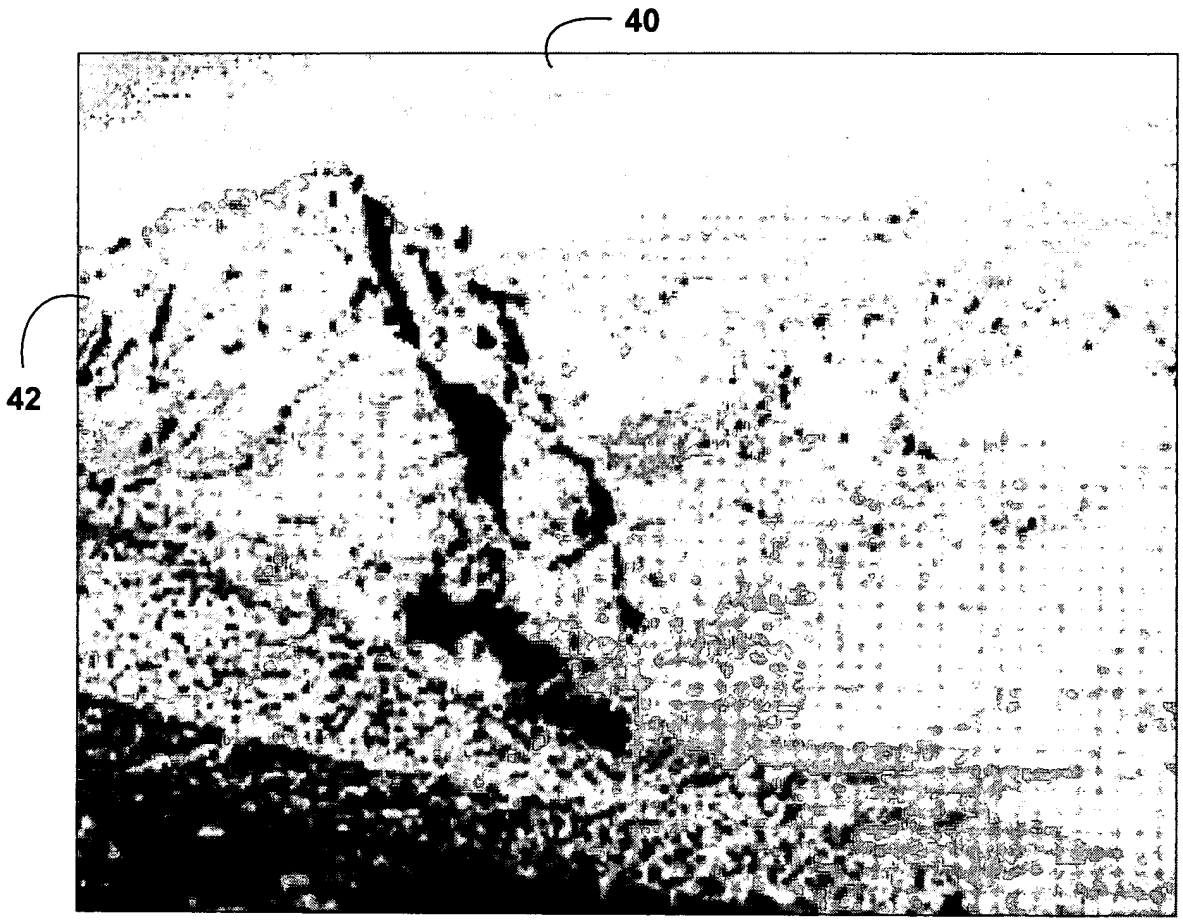

Figure 2

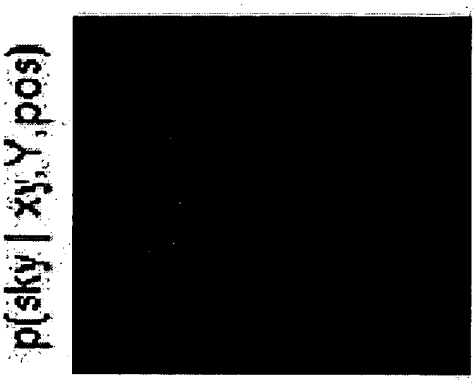

Figure 3(d)

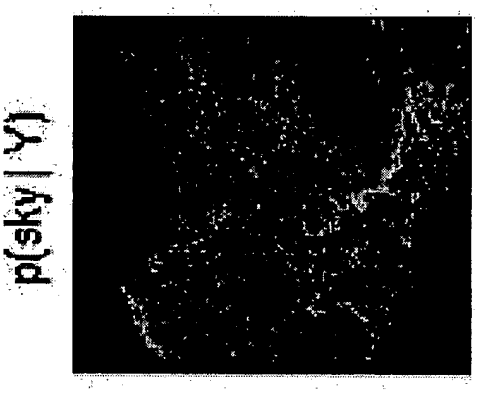

Figure 3(c)

Figure 3(b)

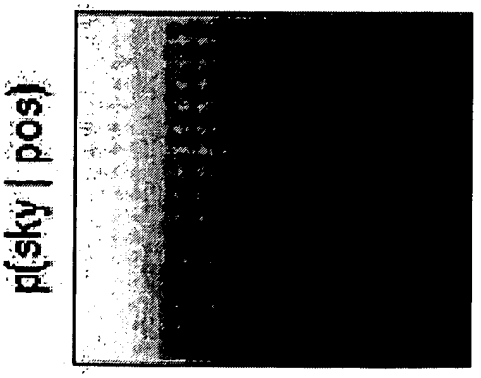

Figure 3(a)

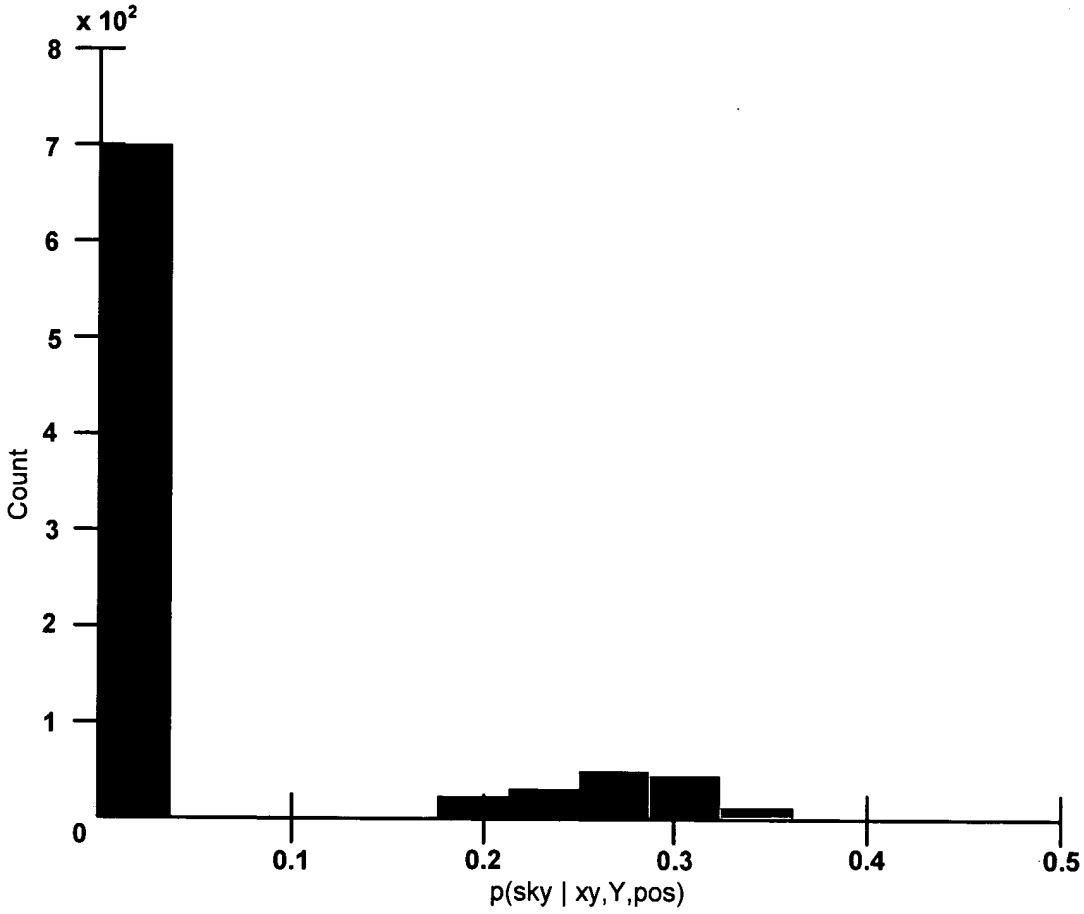

Figure 4

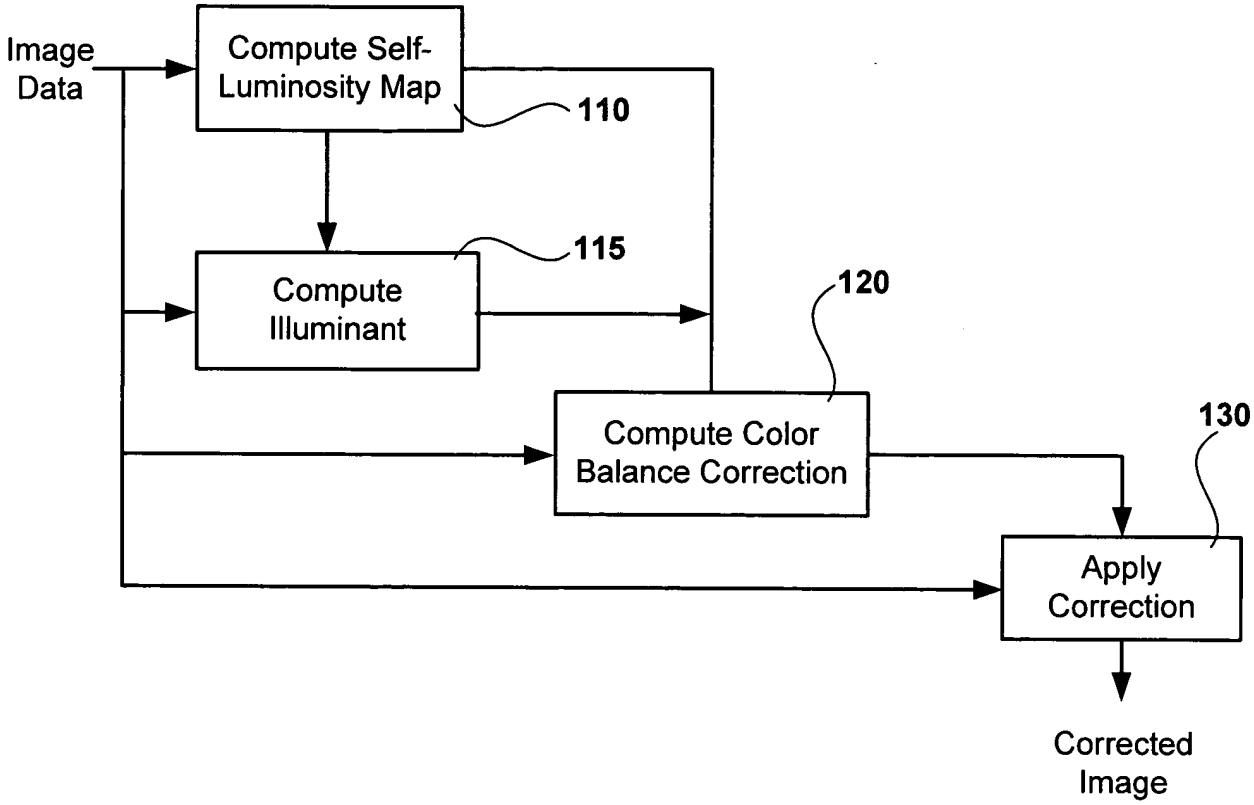
Image Data
Compute Self-Luminosity Map
110
115
Compute Illuminant
120
Compute Color Balance Correction
130
Apply Correction
Corrected Image

Figure 5

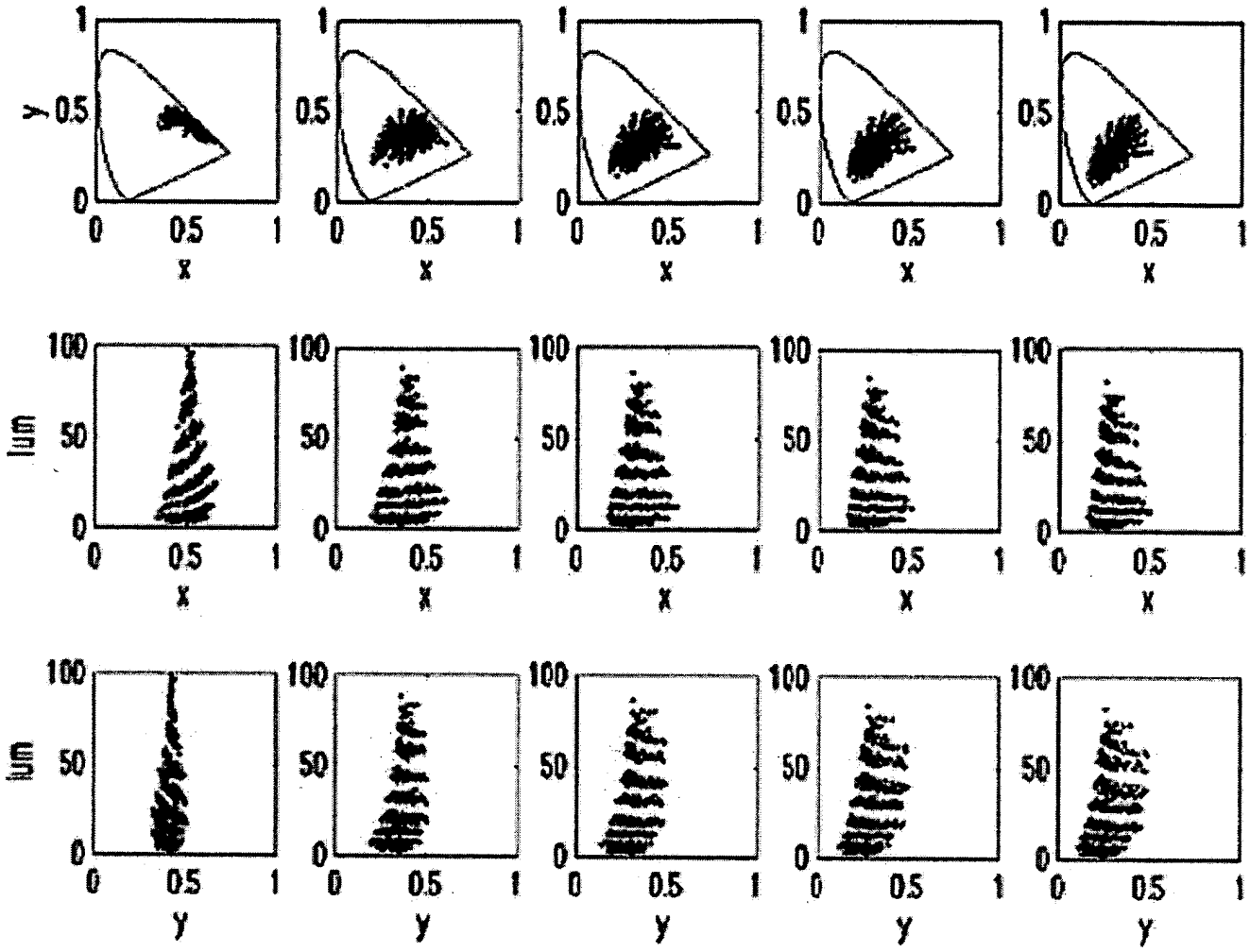

Figure 6

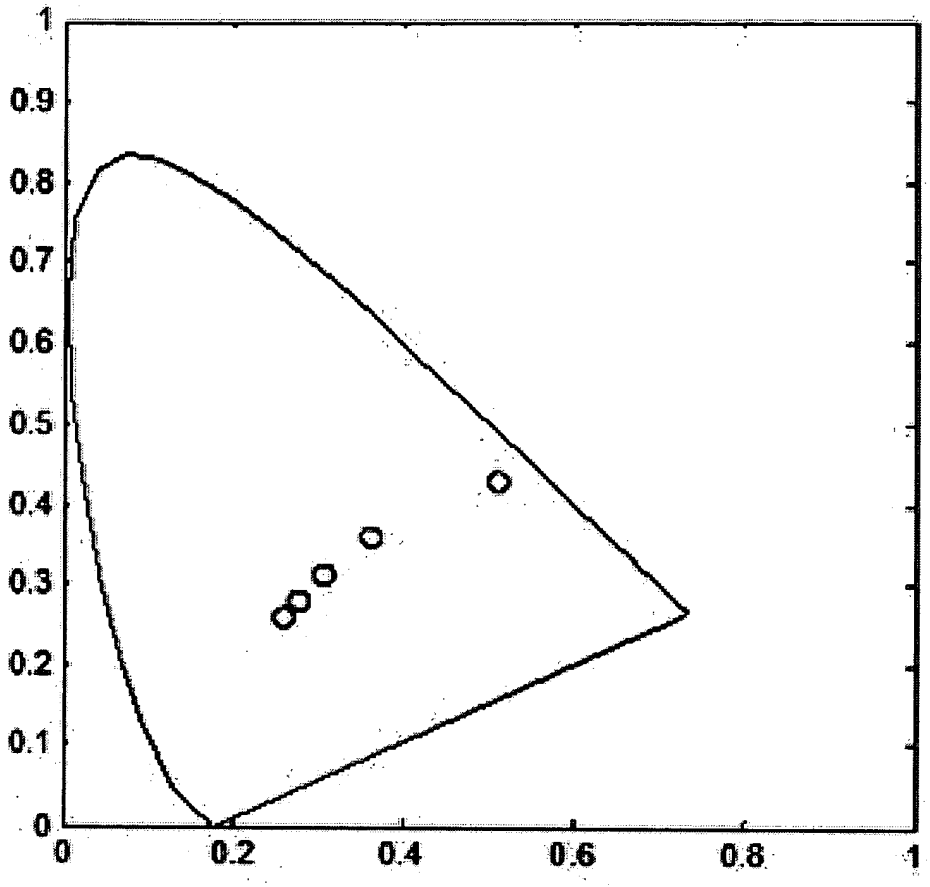

Figure 7

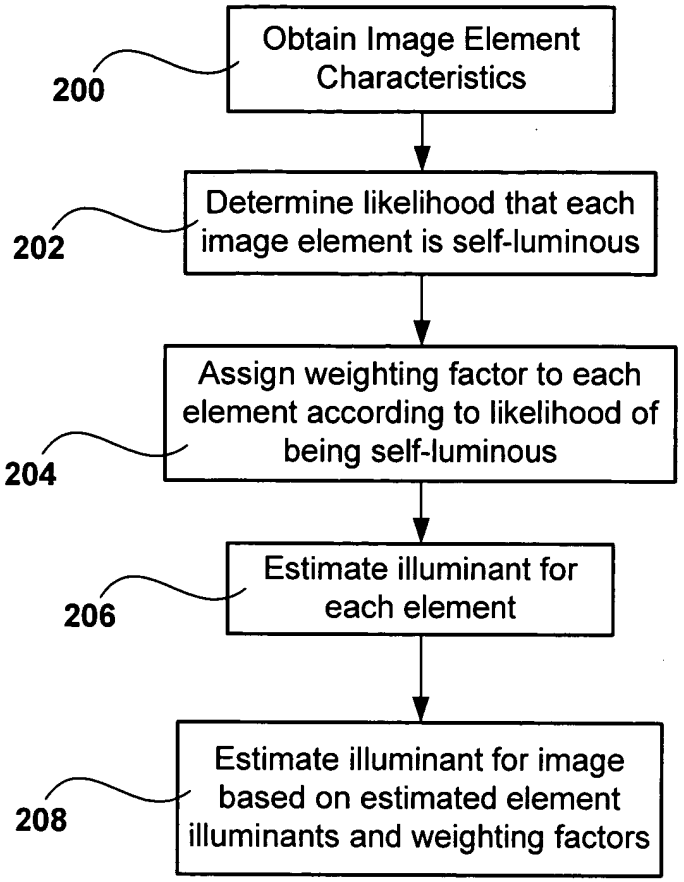

Figure 8

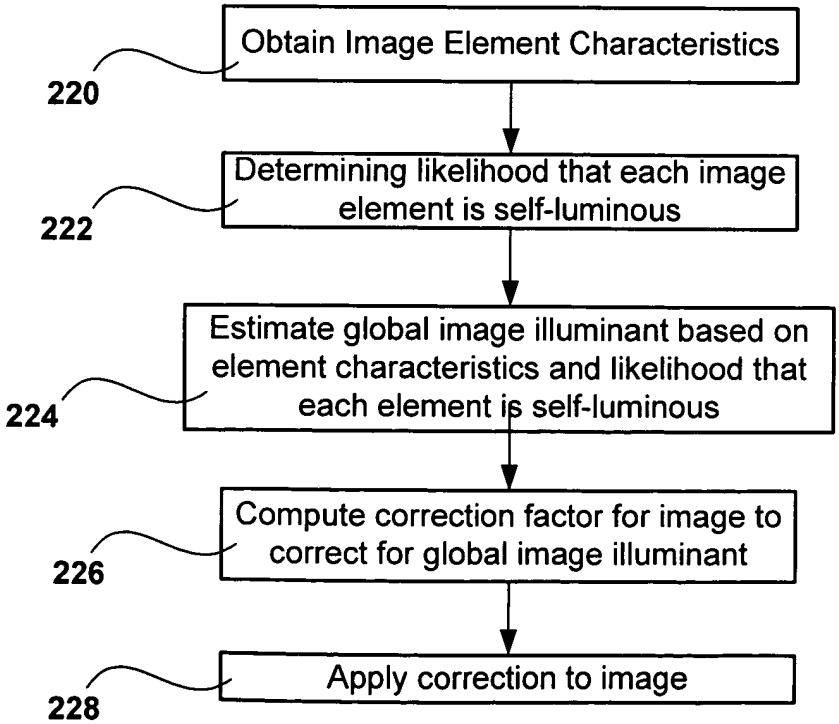

Figure 9

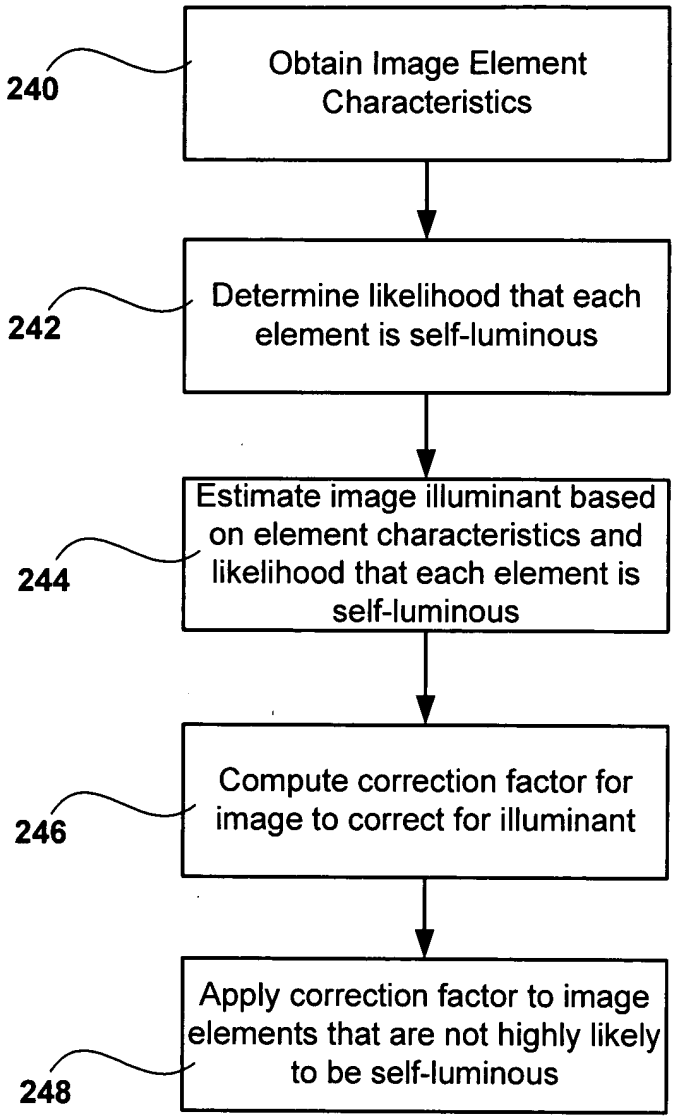
240
Obtain Image Element Characteristics
242
Determine likelihood that each element is self-luminous
244
Estimate image illuminant based on element characteristics and likelihood that each element is self-luminous
246
Compute correction factor for image to correct for illuminant
248
Apply correction factor to image elements that are not highly likely to be self-luminous

Figure 10